



DC/DC 新能源高压电源模块

JWDX--5W 新能源高压电源模块单路系列

JWDX--5W New energy high input power supply module single output series

典型性能 Typical Performance

- ◆外形尺寸：72*50*28 (mm)
Dimension: 72*50*28 (mm)
- ◆宽输入电压范围 (6:1 和 10: 1 输入电压范围)
Wide range input voltage (6: 1 & 10: 1 range input voltage)
- ◆高效率、高功率密度、低纹波
High efficiency、High power density、Low ripple & noise
- ◆黑金属外壳，八面屏蔽，通孔安装
Black metal shell, Eight face shield, Hole is installed
- ◆安规：EN60950
Ann rules: EN60950



输入特性 Input Features

| | | |
|--|--|--------------------------------|
| 输入电压范围 Input voltage range | 标称 700V Nominal voltage 700V 标称 1100V Nominal voltage 1100V | 100~1200VDC 200~2000VDC |
| 输入冲击电流 Inrush current | 200V 600V 1200V 2000V | ≦ 7A ≦ 20A ≦ 35A ≦ 50 |
| 输入欠压保护 Input under-voltage protection | 欠压保护点 Under-voltage protection point | 175~185V |

输出特性 Output Features

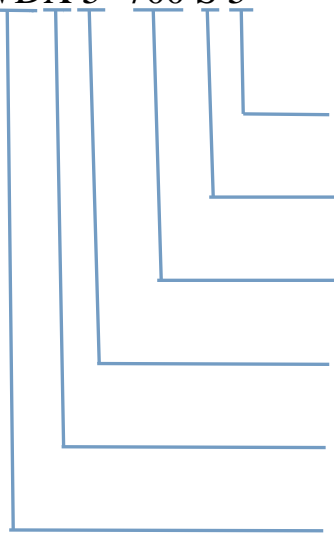
| | | |
|--|--|--|
| 输出电压精度 Voltage tolerance | 标称电压 Nominal voltage | ≦ ±1% (5V ≦ ±2%) |
| 电压调整率 Line regulation (full load) | 输入电压从低端到高端变化 Change of input voltage from lowend to highend | ≦ ±0.5% |
| 负载调整率 Load regul | 20%~100%负载变化 20%~100% Load change | V _O ≦ ±0.5% |
| 温度系数 Temperature coefficient | | ±0.02%/°C |
| 过流保护 Output overcurrent Protection | | 115~150%额定电流,自恢复 115~150%rated output circuit,auto recovery |
| 短路保护 Short Circuit Protection | | 长期, 自恢复 Long-term,auto recovery |
| 输出过压保护 Output over voltage protection | 输出 5V Output 5V 输出 12V Output 12V 输出 24V Output 24V | ≦ 7.5V ≦ 15V ≦ 27V |

一般特性 General Features

| | | |
|-------------------------------|---|--------------------------|
| 隔离耐压 Withstand voltage | 输入对输出 (1 分钟, 漏电流 ≦ 5mA) I/P-O/P (1Mintute,leakage current) ≦ 5mA) | 4000VDC |
| 绝缘电阻 Isolation resistance | 1000V | ≧ 100MΩ |
| MTBF | 环境 25°C Environment 25°C | 2. 0*10 ⁵ Hrs |
| 开关频率 switching frequency | | 65KHz |
| 工作温度 Operating temperature | 55°C 以上降额使用 Above 55°C derating make | -40°C ~70°C |
| 储存温度 Storage temperature | | -40°C ~85°C |
| 工作相对湿度 Operating humidity | 无凝露及结冰现象 (non condensing) | 10%~90%RH |
| 储存相对湿度 Storage humidity | 无凝露及结冰现象 (non condensing) | 5%~95%RH |
| 冷却方式 Cooling method | | 自然冷却 Convection |

命名方式 Naming Rules

JWDX 5 -700 S 5



- 输出电压
Output voltage
- 单路输出
Single Output
- 标称输入电压
Nominal Input voltage
- 输出功率
Output power
- 新能源产品
New energy product
- DC/DC 电源模块
DC/DC power module

产品选型 Product selection

| 产品型号 Model No. | 输入电压范围 Input voltage V_{in} | 输出电压 Output voltage V_O | 输出电流 Output current I_o | 纹波噪声 R & N $V_{(P-P)mV}$ | 效率 Efficiency |
|-------------------|-------------------------------------|---------------------------------|---------------------------------|--------------------------------|------------------|
| JWDX5-700S5 | 100~1200V | 5 V | 1.00A | 80 | 74% |
| JWDX5-700S12 | | 12V | 0.42A | 100 | 77% |
| JWDX5-700S24 | | 24V | 0.21A | 120 | 80% |
| JWDX5-1100S5 | 200~2000V | 5 V | 1.00A | 80 | 75% |
| JWDX5-1100S12 | | 12V | 0.42A | 100 | 78% |
| JWDX5-1100S24 | | 24V | 0.21A | 120 | 80% |

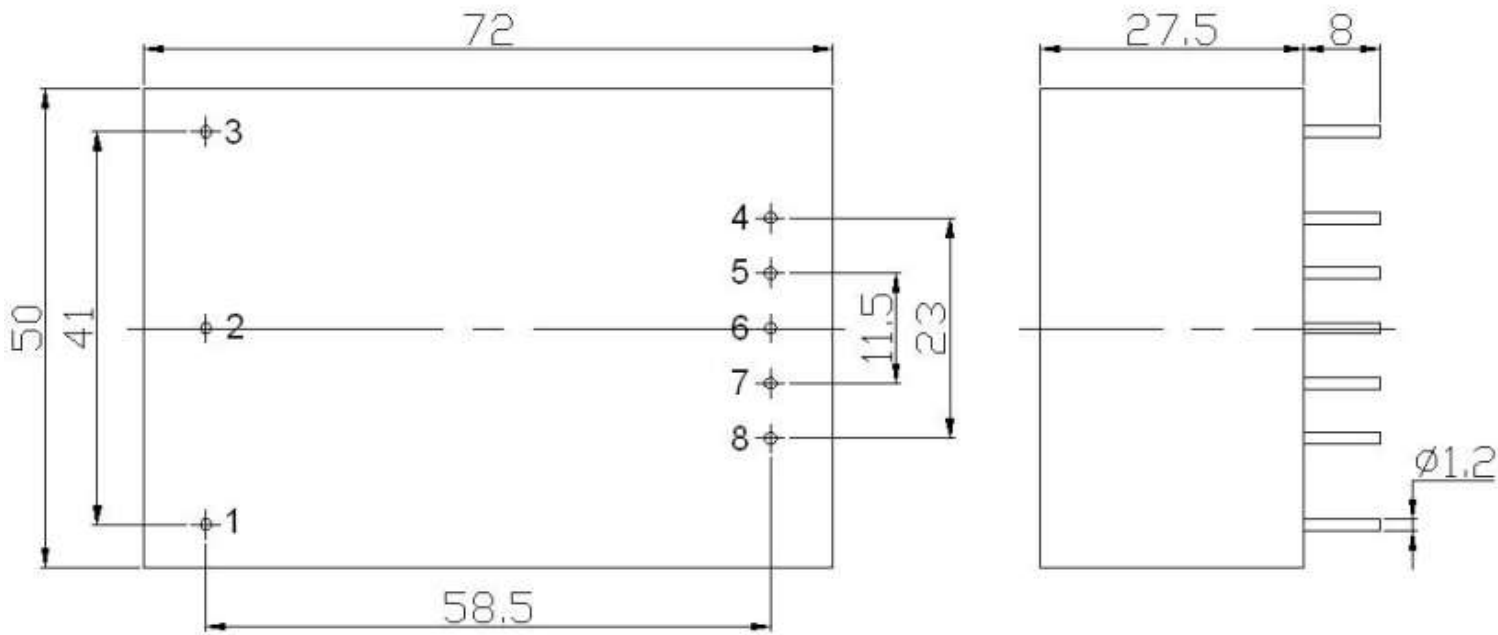
注：因篇幅有限，以上只是部分产品列表，若需列表以外产品，请与本公司销售部联系。

输出纹波噪声（峰-峰值）的测量，请参照模块测试说明中介绍的方法进行。

Note: Due to space limitations, the above list is only for some products, if other than a list of products, please contact the Company's sales department.

Output ripple noise measurement (peak - peak), please refer to the module test notes method is introduced.

封装尺寸图 Mechanical Data

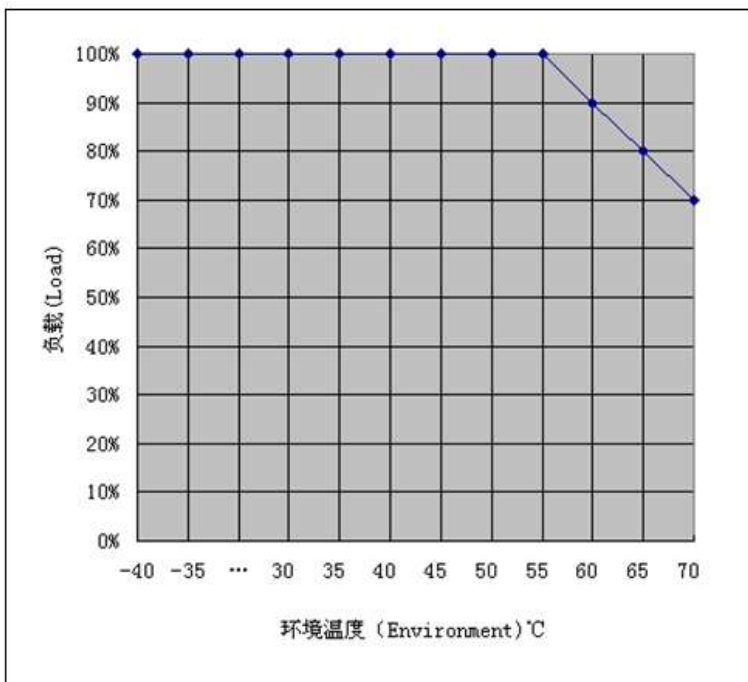


管脚定义 Pin Assignments

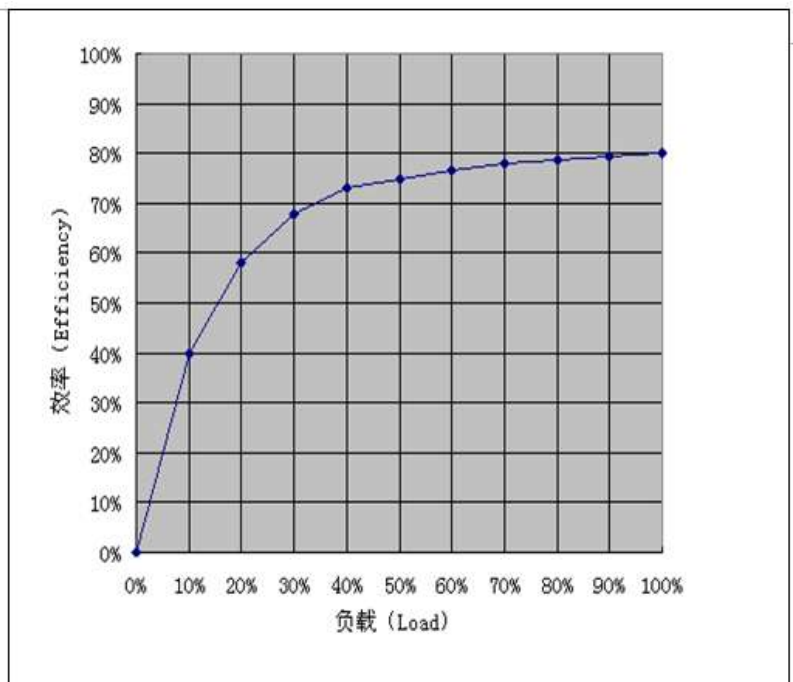
| P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 |
|----|------|------|----------|----|-----|----|-----|
| NP | Vin+ | Vin- | V_{O+} | NP | GND | NP | GND |

典型曲线 Typical curve

降额曲线
Derating curve



效率曲线
Efficiency curve



纹波噪声测试：（靠测法 20MHz）

测试方法：纹波&噪声用示波器来测试。测试模块噪声时为了避免引入额外噪声，须用示波器探头直接接触模块输出引脚

